

125-160GHz Sub-Harmonics Mixer



Description:

AT-SHM-125160 is sub-harmonics mixer covering 125-160GHz. RF frequency range 125-160GHz with WR-06 waveguide, LO port is 62.5-80GHz with WR-12, and IF port is DC-12GHz with SMA Female.

The mixer can be used as both up and down convertor. AT-LNA-110170-1806T is recommended in Rx application.

For more information, please visit www.atmicrowave.com

Feature

- ✓ RF: 125-160GHz
- ✓ LO: 62.5-80GHz
- ✓ IF: DC-12GHz
- ✓ Low LO power requirement

Application

- ✓ High Speed Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Electronical Specifications:

Parameter	Min	Typical	Max
RF Frequency Range		125-160GHz	
Typical RF Input Power		-20dBm	0dBm
LO Frequency Range		62.5-80GHz	
LO Driver	+11dBm	+13dBm	+15dBm
IF Range		DC-12GHz	
Conversion Loss/Rx TEST		-15dB	-20dB
Spec Temp		25C	





AT-SHM-125160

125-160GHz Band Sub-harmonics Mixer

Mechanical Information

Item	Description
RF Port	WR-06
LO Port	WR-12
IF Port	SMA Female
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	30g
Size:	See outline

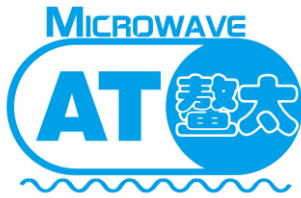
Absolute Maximum Ratings Table

Parameter	Value
IF Port Power	+7dBm
RF Port Power	+5dBm
LO Port Power	+15dBm
Operating Temperature	0 to +50C
Storage Temperature	-65 to +150C

Notes:

1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.





AT-SHM-125160

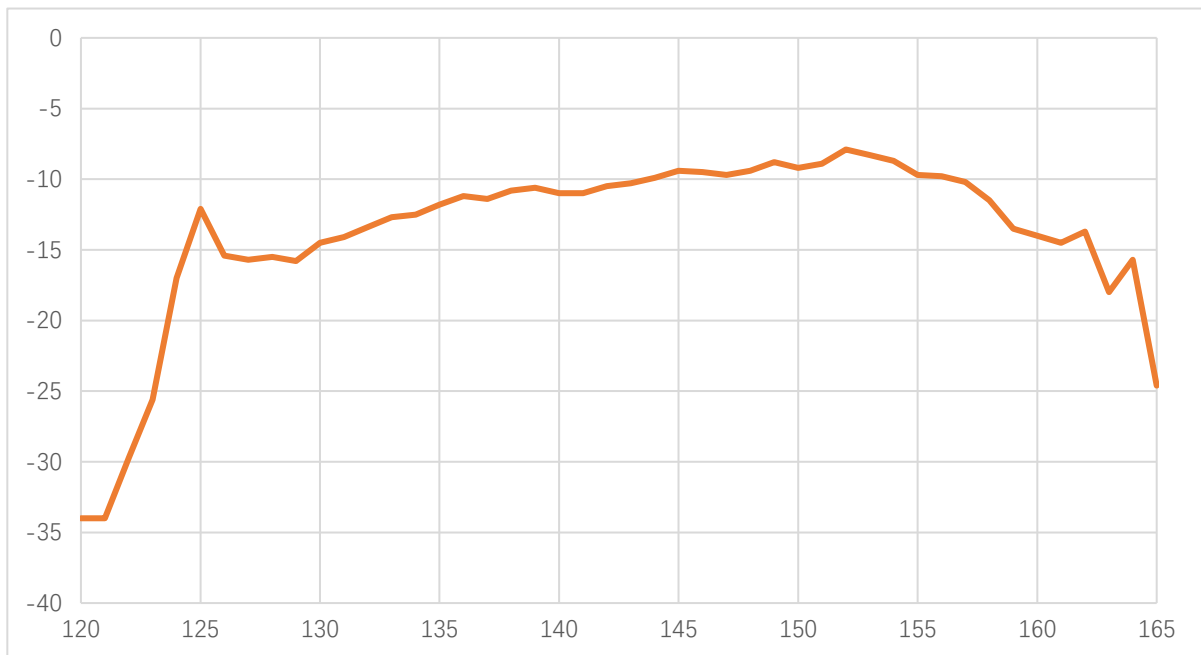
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Test Data:

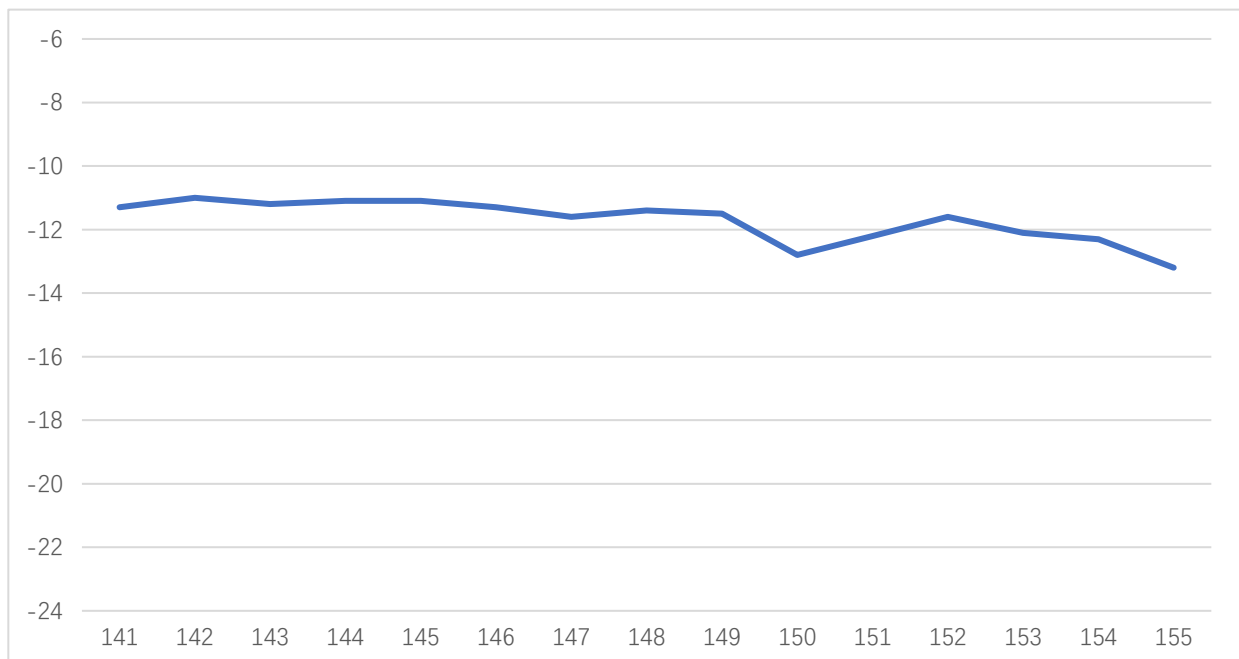
Test Condition:

Down-converter test, AT-AM6-6090-12 used as LO Driver,

IF=100MHz, RF Input Power= -20dBm, 25C



Down-converter Conversion Loss vs Frequency, IF=100MHz



IF Response vs RF Frequency, Fixed LO=140GHz



Dimension (mm)

